Listing of Claims:

1.   (Once Amended) A method to perform an add operation from a root to a leaf, comprising the

steps of:

in a data structure comprising a heap, comprising:

identifying a root in the data structure;

identifying any unused leaf in the data structure; and

traversing from the root to the any unused leaf in the data structure, the traversing step

comprises the step of percolating values within the data structure from the root to any unused

leaf, the traversing step comprises the step of not percolating values within the data structure

from the root to any unused leaf, the percolating values comprising one or more holes.

2-4.   (Canceled)

5.   (Once Amended) A method for performing a remove operation in a data structure, comprising

the steps of:

removing a value from a root that leaves a hole; and

percolating the hole to a leaf position, wherein in the percolating step, comprising the step of

percolating the hole to any arbitrary leaf position in the data structure.

6.   (Canceled)

7.   (Original) The method of Claim 5, wherein the data structure comprises a tree-like structure.